

## **APPENDIX A. ISSUES, QUESTIONS AND CONCERNS FROM PUBLIC MEETINGS**

At each of the public meetings (Table 1), representatives from the Division of Entomology and Plant Pathology presented the proposed gypsy moth project, and answered and received questions and comments. The presentation explained:

- the life cycle, feeding habits and hosts of gypsy moth,
- the identification of gypsy moth,
- survey methods,
- gypsy moth impacts and damage to the trees and forest,
- selection of proposed sites,
- selection of the treatment options,
- the timing and application of treatments,
- boundaries of the treatment sites with maps and photos.

Following the presentation and during the presentation, questions and comments were taken, answered and discussed with the people attending the meetings. Representatives of the Division of Forestry and Purdue University also attended the meetings and assisted in answering and discussing questions and comments from the people attending the meetings.

The questions and comments received at the public meetings concerned four issues;

- Human health and safety;
- Nontarget effects and environmental effects;
- Economic and political impacts;
- Likelihood of success of the proposed project and the treatment options proposed.

The public meetings did not develop any additional issues. Other questions received at the public meetings asked about gypsy moth biology, what the public can do to address gypsy moth on their property, and other insects.

For the state-funded project to treat nine sites with Btk by ground application, each site was a single landowner, except one site that had two landowners. Each landowner received personal contact that included an explanation of the proposed treatment. No additional issues developed from these contacts.

## **ISSUES**

### **Human health and safety**

The questions and comments received at the public meeting regarding human health and safety were in three areas:

- The use and risk of Btk;
- The decision and notification process for the implementation of the project; and
- The time of application of Btk and pheromone flakes

Btk questions concerned the risk to adults and children and when people can go outside after treatment. The responses explained that Btk is a naturally occurring soil bacterium, that minor eye or nasal irritation may occur in a few people, that treatments are halted when children or school buses are present and that no hazard has been identified for the general public exposed to Btk. For people with sensitivity or allergies, it was recommended to stay inside until Btk dries with a suggest time of 30 minutes for Btk to dry.

No questions concerning risk to humans for mating disruption were received.

Notification questions concerned how the people in the sites would be notified when the treatments would occur. The response to notification explained that the public would be notified by direct mail and through public notice and news release of the date and time of treatment.

No questions were received regarding the method of application. The presentation on the proposed project explained that all application is done by aircraft flying 50-100 feet above tree tops, that the application of Btk is done once or twice and occurs in late April through late May with each application starting shortly after dawn continuing until done or until winds exceed 10-15 mph, and the application of pheromone flakes is done once and occurs in mid June to early July with the application starting shortly after dawn and continuing through the day.

### **Nontarget and environmental effects**

For the use of Btk, nontarget questions inquired about Btk effects on bees, wildlife, butterflies (Monarch), animals and birds.

For the risk to nontargets, the responses explained that Btk would have no affect on bees, wildlife, animals and birds. But Btk would have an affect on other caterpillars of butterfly and moths. For the Monarch butterfly it was explained that the caterpillar stage would not be present when Btk is applied. If threatened and endangered butterflies are present, the site would be changed to pheromone flakes.

For the use of pheromone flakes, nontarget questions inquired about effects on butterflies, fish, cattle and other organisms. The responses explained that the pheromone in the flakes only affects gypsy moth.

The questions on environmental effects of Btk asked about the damage to ponds. The responses explained that, if possible, ponds are not treated. However small ponds may not be avoided, but the application of Btk would not harm the pond.

The questions on environmental effects of pheromone flakes asked how long they last, how long they persist in the environment and would they affect fish and cattle.

The responses explained that the flake emits pheromone for 12-16 weeks, that the flake may take 10-15 years to biodegrade and that the flake would not hurt fish or cattle. It was explained that the label does not allow application to pastures and food crops.

During the response to nontarget and environmental questions, the response explained that direct application of Btk and pheromone flakes to water is avoided.

The response explained the impact of gypsy moth defoliation on single trees and forests. The response also explained the public nuisance impact of gypsy moth on the urban environment.

### **Economic and political impacts**

People asked who pays for the treatment, how the decision to proceed is made, about the gypsy moth quarantine, and what other states are doing about gypsy moth.

The response stated that the treatment cost is shared between the USDA-Forest Service and the Indiana Department of Natural Resources.

The response explained the decision process to, not to, proceed with the project and invited people to respond favorably or negatively. The response also explained the process to select sites, determine the treatment alternative, and involve the public through public meetings and comments. The response also explained when the decision to do, or not do, the project would be made.

Regarding the quarantine, the response explained that compliance programs are available for industries to use to meet the requirements of the quarantine that will allow them to ship or move their products outside the quarantine area. They were also informed of the penalties for non-compliance with the quarantine and that homeowners can self-inspect or have a certified pesticide applicator do the inspection of outdoor household articles if they are making a household move.

Regarding what other states are doing, the response explained the gypsy moth status in Michigan, that Michigan is considered generally infested and that Michigan chose to follow a suppression approach to managing gypsy moth.

During the public meeting for the Elcona site, the discussion and comment of the people attending the meeting lead to a vote in support of the project.

### **Likelihood of success**

The questions received were how effective were previous treatments, how often areas would have to be treated, how homeowners can help control gypsy moth, when gypsy moth would be established in the area, how effective is each treatment, how sites and treatment methods are selected, and where to get information on treatment results.

The responses explained the results of treatment in 2004 and the reason to treat the same site in 2005. The responses explained that traps are placed on intensive grids after treatment and the number of moths caught indicates success. It was explained that treatment success would be determined the same year of treatment for Btk, but it would be 2006 before the pheromone flake success could be determined.

The response to how often to treat areas explained that sites are treated one year and not usually treated the following year unless weather conditions cause the treatment to fail. The response also explained that the male moth trap catch and the presence of eggmasses determines the use of one or two applications within the same year

The response to when gypsy moth would be established explained that gypsy moth could be established in the treatment areas in 5-15 years depending on treatment success, natural and artificial movement of gypsy moth and other factors.

The response to effectiveness explained that success is directly linked to what we know about the gypsy moth population in terms of density, area it occupies, and host availability. To be effective the treatment has to be carefully selected and applied properly and at the right time. Examples of past use of pheromone flakes and Btk were given to explain effectiveness.

Regarding site and treatment method selection, the response explained that the Gypsy Moth Slow The Spread program analyzes the results of the gypsy moth to identify sites. Then analysis by IDNR and USFS staff determine the treatment method for each site based on the type and amount of gypsy moth life stages in the site. The response also gave the STS website (<http://gmsts.org>) that people could visit to find the results of the survey and treatments.

## **OTHER QUESTIONS AND CONCERNS**

People asked what people can do if they have gypsy moth, about trapping and survey methods, who comes to check out their trees, about the gypsy moth biology and about other insects.

The response to what they can do explained that people can call the IDNR to let us know if they have gypsy moth, they can destroy eggmasses, or they could use barriers to prevent caterpillars from moving up the tree.

The response for trapping and survey methods explained how traps are set and moths counted. The response also explained that people using traps are discouraged because the data from their trap would not be available to the IDNR to use in the analysis of the trapping survey.

The response for checking trees for gypsy moth explained that the IDNR would send an employee to examine trees suspected of having gypsy moth.

Table 1: Date, time and attendance of Public Meeting(s) for the proposed treatment sites by county.

COUNTY	SITE	DATE	TIME	# Attending
Allen	Sheriff Dept; Cedarville; Fort Wayne East	January 26, 2005	2:00 PM 7:00 PM	46
DeKalb	DeKalb County Airport; Saint Joe & Spencerville; Devall & County Line; CR 60& CR 51; CR 64 & CR 51	January 26, 2005	10:00 AM 2:00 PM 7:00 PM	16
Elkhart	Elcona	January 27, 2005	11:00 AM	31
	Bristol	January 27, 2005	2:00 PM	20
Kosciusko	Pierceton 05	January 28, 2005	11:00 AM	0
LaGrange	Topeka	January 24, 2005	10:00 AM	7
LaPorte	Lake Shore & Ridgemoore; Prison; Northbrook 05	January 24, 2005	9:30 AM	24
	50 West; 300 East	January 25, 2005	10:00 AM	12
Noble	Merriam 05; 300 South 05	January 24, 2005	2:00 PM	5
Porter	Cobbs Corner	January 24, 2005	2:00 PM	17
St. Joseph	Bendix County Park	January 27, 2005	11:00 AM	13
	Ironwood; Brick & Auten	January 27, 2005	2:00 PM	32
Whitley	Lincoln Way	January 24, 2005	2:00 PM	*

\* Lincoln Way and Merriam 05 & 300 South 05 public meeting was held jointly with total of 5 attending.